

Patent Application No. 09/548,141

REMARKS

This Response is in response to the Office Action dated November 16, 2005 ("OA"). In the Office Action, claims 1-6, 12-16, 22-35 and 38 were rejected under 35 U.S.C. §102. Currently pending claims 1-6, 12-16, 22-35 and 38 are believed allowable, with claims 1, 17, 28, 38, and 39 being independent claims.

CLAIM REJECTIONS:

Claims 1-6, 12-16, 22-35 and 38 were rejected under 35 USC §102(e) as anticipated by U.S. Patent No. 6,412,000 to Riddle et al. (hereinafter "Riddle"). OA, page 2. To anticipate a claim, a reference must teach every element and limitation in the claim. MPEP 2131.

Riddle appears to describe a management system for network bandwidth based on information ascertainable from multiple layers of an OSI network model. Riddle, col. 1, ln. 54-57. A classification tree may be utilized to compare a current traffic flow to attributes of a given traffic class. Riddle, col. 9, ln. 34-37. Leafs in the classification tree can contain policies for managing the current traffic flow. Riddle, col. 9, ln. 38-41.

Claim 1

Claim 1 of the present invention recites, in part, "successively passing the data packet to each child of a first tree level until a first child of the first tree level of the classification tree indicates a satisfaction of a node-criteria packet matching function of said first child." In rejecting claim 1, the Office Action alleges that these claim limitations can be found at column 9, lines 28-62. OA, pg. 2.

Riddle, at the cited passage, states,

A classification tree is a data structure representing the hierarchical aspect of traffic class relationships. Each node of the classification tree represents a class, and has a traffic specification, i.e., a set of attributes or characteristics describing the traffic associated with it. Leaf nodes of the classification tree may contain policies. According to a particular embodiment, the classification process checks at each level if the flow being classified matches the attributes of a given traffic class. If it does, processing continues down to the links associated with that node in the tree. If it does not, the class at the level that matches determines the policy for the flow being classified. If no policy specific match is found, the flow is assigned the default policy.

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In a preferred embodiment, the classification tree is an N-ary tree with its nodes ordered by specificity. For example, in classifying a particular flow in a classification tree ordered first by organizational departments, the attributes of the flow are compared with the traffic specification in each successive department node and if no match is found, then processing proceeds to the next subsequent department node. If no match is found, then the final compare is a default "match all" category. If, however, a match is found, then classification moves to the children of this department node. The child nodes may be ordered by an orthogonal paradigm such as, for example, "service type." Matching proceeds according to the order of specificity in the child nodes. Processing proceeds in this manner, traversing downward and from left to right in FIGS. 2A and 2B, which describe a classification tree, searching the plurality of orthogonal paradigms. Key to implementing this a hierarchy is that the nodes are arranged in decreasing order of specificity. This permits search to find the most specific class for the traffic before more general. Riddle, col. 9, ln. 28-62.

As evident from the quoted passage, Riddle teaches a classification process that checks if the flow being classified matches attributes stored in nodes of a tree. By contrast, claim 1 recites that the nodes themselves indicate satisfaction of a node-criteria packet matching function. The Applicants respectfully submit that no such teaching or suggestion exists in the cited passage of Riddle, or anywhere else in Riddle. Rather than child nodes indicating satisfaction of a node-criteria packet matching function, as recited in claim 1, Riddle merely teaches comparing against attributes stored in nodes of a tree. Riddle, col. 9, ln. 28-34.

Claim 1 also recites, in part, "repeating the step of passing and forming for a next tree level until no first child of said next level at a succeeding next level indicates satisfaction of the node-criteria packet matching function of said first child of said next level." The Office Action alleges that these claim limitations can be found at column 9, lines 28-62 of Riddle. OA, pg. 3.

The Applicant respectfully submits that that nowhere in the cited text of Riddle is there a teaching or suggestion of repeatedly passing the data packet to a next tree level until there is no indication of match satisfaction by a child node of the next tree level, in accordance with claim 1. As mentioned above, such limitation are not contained or suggested in Riddle since, for example, Riddle only mentions that the tree is traversed from top to bottom. Riddle, col. 11, ln. 29-31.

For at least the above reasons, the Applicant respectfully requests that the rejection of claim 1 be withdrawn. Furthermore, claim 1 is believed

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allowable over the cited documents, and an indication of allowance is earnestly solicited.

Claims 2-3, 12-16, 22-27, and 33-35

Claims 2-3, 12-16, 22-27, and 33-35 are dependent on and further limit claim 1. Since claim 1 is believed allowable over the cited art, claims 2-3, 12-16, 27, and 33-35 are also believed allowable over the cited art.

Claim 28

Claim 28 recites, in part, "a packet module to successively pass the packet from child node to child node at a next tree level until a first child node of the next tree level of the classification tree which indicates a satisfaction of a node-criteria of the first child node, and to form the data packet into a matched packet until no first child node of at a succeeding next level indicates satisfaction of the first node-criteria of the first child node of the succeeding next level." The Office Action alleges that these claim limitations can be found at column 9, lines 28-62 of Riddle. OA, pg. 5.

As discussed above, Riddle merely teaches comparing against attributes stored in nodes of a tree. Riddle, col. 9, ln. 28-34. By contrast, claim 28 recites that the nodes themselves indicate satisfaction of a node-criteria packet matching function. The Applicant respectfully submits that nowhere in Riddle is there a teaching or suggestion of the above limitations of claim 28. For at least this reason, claim 28 is believed not anticipated by Riddle and is thus allowable over the cited art.

Claims 29-32

Claims 29-32 are dependent on and further limit claim 28. Since claim 28 is believed allowable over the cited art, claims 29-32 are also believed allowable over the cited art.

Claim 38

Claim 38 recites, in part, "means for successively passing the data packet to each child of a first tree level until a first child node of the first tree level of the classification tree indicates a satisfaction of a node-criteria of said first child node, and the first child node forming said data packet into a matched packet." The Office Action alleges that these

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claim limitations can be found at column 9, lines 28-62 of Riddle. OA, pg. 2.

As discussed above, Riddle merely teaches comparing against attributes stored in nodes of a tree. Riddle, col. 9, ln. 28-34. By contrast, claim 38 recites that the nodes themselves indicate satisfaction of a node-criteria packet matching function. The Applicant respectfully submits that nowhere in Riddle is there a teaching or suggestion of the above limitations of claim 38. For at least this reason, claim 38 is believed not anticipated by Riddle and is thus allowable over the cited art.

The Applicant respectfully submits that nowhere in Riddle is there a teaching or suggestion of the above limitations of claim 38. For at least this reason, claim 38 is believed not anticipated by Riddle and is thus allowable over the cited art.


CONCLUSION

In view of the forgoing remarks, it is respectfully submitted that this case is now in condition for allowance and such action is respectfully requested. If any points remain at issue that the Examiner feels could best be resolved by a telephone interview, the Examiner is urged to contact the attorney below.

No fee is believed due with this Amendment, however, should a fee be required please charge Deposit Account 50-0510. Should any extensions of time be required, please consider this a petition thereof and charge Deposit Account 50-0510 the required fee.

Respectfully submitted,

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